

### Strategies:

Strategy #2: Provide secured electronic access to information and services

### Strategy Components

#### Strategy #1: Ensure effective and efficient utilization of IT

##### Relevant Goals

Goal #3: Educational Systems Improvements

Goal #6: Opportunity to Learn

##### Resources and Costs

Workstation & Peripherals	Estimated Cost
<p>Workstation Requirements:</p> <p>Desktops:</p> <p>Desktops will be utilized by functional or analytical users whose needs might include, but are not limited to, application development tools and basic office productivity applications. Desktops will be an Intel based platform, running on Windows XP and including Office XP as a software package. Minimum hardware requirements:</p> <ul style="list-style-type: none"> <li>• CPU: P4 2GHZ Processor</li> <li>• RAM: 256 MB</li> <li>• Hard Drive: 40 GB</li> </ul> <p>Mobile/Laptop:</p> <p>Laptops will be utilized by functional or analytical users that are frequently mobile and need easy, ready to run computing. Laptops will be an Intel based platform, running on Windows XP and including Office XP as a software package. Minimum hardware requirements:</p> <ul style="list-style-type: none"> <li>• CPU: P4 2GHZ Processor</li> <li>• RAM: 256 MB</li> <li>• Hard Drive: 40 GB</li> </ul> <p>Servers:</p> <p>Servers will be utilized for multiple purposes (Application, Database, File and Print, Web), providing services for security, maintenance, data sharing, and other end user functionality. Servers utilized will be, both, Windows and Unix based network operating system, determined on a functionality-needed basis. Minimum hardware requirements:</p> <ul style="list-style-type: none"> <li>• CPU: Dual Pentium 4 Xeon Capable</li> <li>• RAM: 2 GB</li> <li>• Hard Drive: 10 GB Raid 1</li> </ul>	<p>2002:</p> <p>2003:</p> <p>2004:</p>
N/A	<p>2002:</p> <p>2003:</p> <p>2004:</p>
Software & Supplies	Estimated Cost

N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
<b>Network &amp; Infrastructure</b>	<b>Estimated Cost</b>
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
<b>Security</b>	<b>Estimated Cost</b>
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
<b>Policy &amp; Procedures</b>	<b>Estimated Cost</b>
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
<b>Maintenance &amp; Upgrades</b>	<b>Estimated Cost</b>
CPS will maintain and support systems as needed by the end-users (students, teachers, administrators). Considerations will continue to be made in the district's best interest in regards to maintaining, upgrading, re-purposing, and retiring technology resources.	2002: 2003: 2004:

<p>CPS is in the process of executing the District Student Technology Enhancement Program (DSTEP). This program entails upgrading all of the servers in the schools from Windows NT to Windows 2000. To facilitate this upgrade, additional memory and drive space will be added to systems where applicable. The scope for servers to be upgraded are as follows: two servers per Junior High School, two servers per High School, and one server per Grade School.</p> <p>Instructional (desktop) computers will be upgraded to Windows XP and Office XP. To facilitate this upgrade, additional memory will be added to the systems. There are approximately 500 computers that will be replaced with newer computers.</p> <p>To complete this initiative approximately 16 resources will be utilized to deploy all of the systems and configure the desktops and servers. A firm will contract to design the process for imaging and deploying the systems. Remaining team will physically deploy the computers. This project should be completed by January 2004.</p> <p>Microsoft will no longer support the current operating systems installed on many of the computers within the school system. Because of this situation, DSTEP was started. Additionally, Office XP was adopted by the High School curriculum, driving the need to upgrade the computers.</p>	<p>2002:</p> <p>2003:</p> <p>2004:</p>
	<p>2002:</p> <p>2003:</p> <p>2004:</p>

### Relevant State Technology Indicators

Classroom Technology  
 Electronic Resources (Instructional)  
 Planning and Coordination

### Performance Indicators

Providing sufficient resources for students  
 Ensure teachers are qualified to use resources and teach students effectively

### Action Steps

Action Step	Benchmark	Start	End
District Student Technology Enhancement Program (DSTEP)		01-2003	01-2003

### Leadership

### Key Personnel

## Strategy #2: Provide secured electronic access to information and services

### Relevant Goals

Goal #3: Educational Systems Improvements  
 Goal #9: Teacher Quality

## Resources and Costs

Workstation & Peripherals	Estimated Cost
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
Software & Supplies	Estimated Cost
Data storage requirements and security surrounding data storage for students and administrative staff within the CPS is surpassing current storage capacities and capabilities. In many instances personal files are inadvertently deleted and in some cases enough storage is not available for users to store the files.	2002: 2003: 2004:
CPS is considering deploying a storage area network (SAN) to provide the ability for students and administrative staff to securely store documents on the network. CPS is looking to implement a SAN solution for the 2005 school year at the earliest.	2002: 2003: 2004:
Network & Infrastructure	Estimated Cost
High capacity, high availability networks will enable new ways to deliver services, educate students, and promote community involvement. Voice, video, and data network technologies are converging. The district can no longer afford to develop and manage network resources independently. CPS must make strategic and cooperative investments to prepare their constituents to take advantage of the technologies that are under development today and will be available in the near future.	2002: 2003: 2004:
The enterprise network has been designed and will be deployed and managed to support a wide variety of users by all members of the enterprise. When fully deployed (estimated date – August 2004), the enterprise network will provide transport for voice, video, and data. By aggregating the demand of the enterprise, it will be possible to achieve significant economies of scale and cost savings for use of a high-capacity broadband network. Among the most important applications supported by the network technology is distance education and learning delivered by and to the district's schools.	
The network upgrade will consist of converting the routers at the schools to ones that will support Ethernet (removing the token ring) and provide gigabyte links (1000 Million Bytes Per Second throughput) at the backbone. Currently, network throughput is getting bogged at the schools. The new infrastructure would alleviate the connection pinch and prepare CPS for emerging initiatives like IP telephony and wireless.	2002: 2003: 2004:
This initiative will be deployed over a four-year cycle. In year one, the ERATE eligible Middle and High Schools will be implemented. In year two, the remaining Middle and High Schools and some Grade Schools will be implemented. In years three and four, the remaining Grade Schools and administrative sites will be implemented. Third party vendors will supply resources for this project with CPS MIS staff project managing the project.	
Security	Estimated Cost
CPS will continue with our existing stance regarding theft or vandalism of technology equipment. Our new strategy will not require additional considerations.	2002: 2003: 2004:

Network and data security are critical functions within CPS. Several legislations have been created that will affect how CPS performs, monitors, and controls security within the environment (i.e. Children's Internet Protection Act - CIPA, Health Insurance Portability and Accountability Act - HIPAA). This Initiative will incorporate setting security policies and procedures.	2002: 2003: 2004:
<b>Policy &amp; Procedures</b>	<b>Estimated Cost</b>
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
<b>Maintenance &amp; Upgrades</b>	<b>Estimated Cost</b>
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:

**Relevant State Technology Indicators**

Classroom Technology  
Connectivity  
Electronic Resources (Instructional)

**Performance Indicators**

Provide a way to consolidate and study relevant data

**Action Steps**

Action Step	Benchmark	Start	End
Storage Area Network (SAN) Implementation		01-2003	01-2003
Network Infrastructure Upgrade		01-2003	01-2003
Initiate Security Policies and Procedures		01-2003	01-2003

**Leadership****Key Personnel****Strategy #3: Supporting services for elected officials, CPS, management, and employees****Relevant Goals**

Goal #2: 21st Century Skills  
Goal #3: Educational Systems Improvements

Goal #7: Parent/Community Involvement

Resources and Costs

Workstation & Peripherals	Estimated Cost
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
Software & Supplies	Estimated Cost
In the future state IT environment, CPS will leverage information at your fingertips approach to computing services. All applications and data will be available via multiple access methods, desktop computers, mobile computing devices, internal network and the public Internet. While the primary goal is to support the districts students and teachers, the CPS IT team envisions extending its student performance data to parents and improving the overall administrative operations of the district through the enhanced computing services.	2002: 2003: 2004:
The technologies we will use include anytime, anywhere access to applications and systems via Internet capable systems, a customizable application portal to deliver user specific applications and data, Oracle tool set for enterprise application development, Java for Web development, SAS for data analysis, and Cognos for business intelligence analysis.	
Enterprise Resource Planning (ERP) Initiative	2002: 2003: 2004:
The Columbus Public Schools (CPS) has engaged IBM Global Services to provide an Enterprise Applications review (EAR). A major deliverable of the EAR is the selection of an Enterprise Resource Planning (ERP) software package. The EAR should be completed by October and at that time an RFP process will begin to select an implementation vendor for the ERP system.	
IBM expects that the ERP systems can be implemented in 9-12 months or before the end of calendar year 2004. Since the ERP system is comprised of financials, payroll, and human resources with some of these components should be implemented during the summer or fall of 2004.	
With the exception of implementation during calendar year 2004 it should also be expected that additional hardware, storage, and human resources necessary to support this implementation. An assumption was made that the implementation would take longer than 9-12 months therefore the above three items have not been included in the '04 MIS budget. There is a possibility, depending on the detail implementation timeframe, that we could delay these three items until the '05 budget. If delayed until the '05 budget these items must be acquired early in the '05 budget year, most likely in July 2004.	
Departmental Systems Deployment	
CPS will purchase, create, or modify applications within the transportation, food service, and facilities departments within the school district. These systems will be analyzed and a software selection will occur to the applications that will replace and be implemented to provide.	
Network & Infrastructure	Estimated Cost

N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
Security	Estimated Cost
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
Policy & Procedures	Estimated Cost
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
Maintenance & Upgrades	Estimated Cost
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:

#### Relevant State Technology Indicators

Electronic Resources (Administrative)  
 Electronic Resources (Instructional)  
 Planning and Coordination

#### Performance Indicators

Provide consolidation of processes, eliminate paper, and force better budget accountability

#### Action Steps

Action Step	Benchmark	Start	End
Enterprise Resource Planning (ERP)		01-2003	01-2003
Departmental Systems Deployment		01-2003	01-2003

#### Leadership

#### Key Personnel

## Strategy #4: Supporting the community's educational needs

### Relevant Goals

- Goal #1: Standards-Based Learning
- Goal #3: Educational Systems Improvements
- Goal #4: Committed Leadership
- Goal #5: Efficient/Equitable Operations
- Goal #6: Opportunity to Learn
- Goal #8: Student Motivation

### Resources and Costs

Workstation & Peripherals	Estimated Cost
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
Software & Supplies	Estimated Cost
Data warehouse platform to support on-line analytical processing (OLAP), trend analysis, longitudinal studies, and a Key Performance Indicator (KPI) dashboard that will support data driven decisions. CPS has initiated a project called Shared Access & Record Keeping (SHARK) data warehouse to report on information obtained primarily from the SIS system. This data warehouse was initiated to provide a central repository for reporting purposes and to ease system load on the servers housing the SIS application. Several projects are planned to continue enhancement on the data warehouse including:	2002: 2003: 2004:
<ul style="list-style-type: none"> <li>• Student Demographics &amp; Final Marks</li> <li>• Enrollment &amp; Attendance</li> <li>• Discipline</li> <li>• Test Scores</li> <li>• Period Marks</li> <li>• Unfinished Business</li> </ul>	
N/A	2002: 2003: 2004:
Network & Infrastructure	Estimated Cost
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
Security	Estimated Cost



N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
<b>Policy &amp; Procedures</b>	<b>Estimated Cost</b>
Architecture design policies consist of a set of guidelines used to provide direction for which and how technologies should be deployed within the environment. These guidelines include comments surrounding servers, networking, application development, data, and security administration. These guidelines specify items such as network traffic will be TCP/IP, web servers will be based on Microsoft IIS Web servers, all data will be stored in Oracle databases. CPS is looking to initiate this project in the second quarter of 2003.	2002: 2003: 2004:
<p><b>CPS Policy Guidelines:</b></p> <ol style="list-style-type: none"> <li>1. Use organization strategy and organization needs to understand technology requirements, limitations, and implications.</li> <li>2. Establish a baseline of the CPS's technical architecture.</li> <li>3. Determine what is working and what is not working.</li> <li>4. Determine future technology requirements.</li> <li>5. Determine what technologies will provide CPS with an organization advantage.</li> <li>6. Design a planned architecture.</li> <li>7. Test that the plan meets the validity test.</li> <li>8. Communicate the plan.</li> <li>9. Maintain the plan to meet the ever-changing organization and technical requirements.</li> </ol> <p>While CPS expects compliance to its technology architecture, there is considerable benefit for CPS users when they comply with it. As CPS's investment in products, tools, and support resources increases, more technological options will be made available to the users to deliver applications faster and at lower costs.</p>	2002: 2003: 2004:
<b>Maintenance &amp; Upgrades</b>	<b>Estimated Cost</b>
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:
N/A	2002: 2003: 2004:

### Relevant State Technology Indicators

Electronic Resources (Administrative)  
 Electronic Resources (Instructional)  
 Planning and Coordination

### Performance Indicators

Provide a way to consolidate and study relevant data

### Action Steps

Action Step	Benchmark	Start	End
Data Warehousing		01-2003	01-2003
Data Architecture Standards		01-2003	01-2003

### Leadership

### Key Personnel

## 4.2 Technology Related Staff Development

Staff Development Activity	Start	End	Cost
Train-the-Trainer	01-2003	01-2003	2002: 2003: 2004:
Coaching and Mentoring	01-2003	01-2003	2002: 2003: 2004:
Self-Study Training	01-2003	01-2003	2002: 2003: 2004:
On-the-Job Training	01-2003	01-2003	2002: 2003: 2004:
Site-Based Training	01-2003	01-2003	2002: 2003: 2004:
Peer-Training Model	01-2003	01-2003	2002: 2003: 2004:

## 4.3 Technology-Related End-User Support Services

### Technology Support Staffing

The District shares the beliefs and assumptions on staff development outlined in the Ohio SchoolNet Report on Educational Technology State Plan to implement Technology to Support Student Learning program. The Columbus Public School District technology committee has addressed as its priority the providing of the staff with adequate training in computerized software applications, e.g., administrative applications, Internet, etc. We cannot expect the staff of the district to fully understand and effectively utilize the technology applications without being properly trained.

The Technology Committee recommends that the district urge the development of a comprehensive staff development/training plan to include initial beginning of the school year onsite training and follow-up on-site training throughout the school year for software technology applications and curriculum technology integration.

Estimated Cost:

2002:

2003:

2004:

Technology Support Services

End-user support services are critical to the implementation for the District technology strategy. Support and training will be crucial for day-to-day activities. As a result, Technology Support Services will implement the following strategies:

- Hire a full-time staff development curriculum specialist with adequate knowledge to provide teacher training in the areas of project-based learning and technology curriculum integration. The staff development specialist will provide hands-on training for all staff members based upon the level of expertise of each individual teacher. This full-time position will concentrate fully in developing and providing the training needed for all Columbus Public Schools teachers and staff to begin the development of moving toward a project-based learning curriculum and the integration of technology into classroom lessons.
- Provide beginning of the year training and staff development, new hire/refresher courses. At least one full district in-service day dedicated to technology training and staff development for each school. This will include in-service in new technologies deployed by the district and technology integration ideas into the curriculum. New staff and/or refresher courses offered by the district to introduce new staff members to current district technologies and refresh staff knowledge in existing technologies.
- Develop and deploy a staff development training course schedule to be offered throughout the school year. The training schedule will offer several types of training sessions in computer-software related technologies. The training course offerings will be made available to all district staff. The training series which Columbus Public Schools will base staff development will be known as the Technology Training Learning Series (TTLS). The Technology Committee has addressed as it's priority, to provide the staff with adequate training in computerized software applications, e.g., administrative applications, Internet, etc. We cannot expect the staff of the district to fully understand and effectively utilize the technology applications without being properly trained. Because everyone comes to the District with different levels of computer experience, a one-size fits-all training program won't work. The largest non-capital cost will be training, which will be absolutely necessary to ensure that equipment is used effectively. The largest group requiring training will be teachers, who will require comprehensive in-service as the district sets new employment expectations.
- Require that the district provide adequate outside training for staff by professional trainers in areas which adequate training cannot be offered within the district. Professional trainers may be called upon to provide the technology staff development training when the district computer systems engineer deems that no adequate trainer exists within the district to provide adequate specialized training. For example, training for a comprehensive administrative software program.
- Expand the use of video and teleconferencing to deliver comprehensive staff development opportunities for technology/curriculum integration and technology systems training.

Estimated Cost:

2002:

2003:

2004:

## Phase 5 - Determine Budget & Identify Funding Sources

### 5.3 Three Year Budget

Category	2002-2003	2003-2004	2004-2005	Category Totals
Workstations	\$1134915	\$704915	\$704915	\$2544745
Peripherals	\$372000	\$305500	\$305500	\$983000
Software	\$1221874	\$1112674	\$1112674	\$3447222
Supplies	\$647150	\$415000	\$415000	\$1477150
Network	\$9184215	\$7665952	\$7665952	\$24516119
Infrastructure	\$2462708	\$230836	\$230836	\$2924380
Security-Equipment	\$191500	\$151500	\$151500	\$494500
Security-Information	\$0	\$0	\$0	\$0
Policies	\$4000	\$4000	\$4000	\$12000
Procedures	\$0	\$0	\$0	\$0
Maintenance	\$1615590	\$1480590	\$1480590	\$4576770
Upgrades	\$573000	\$228000	\$228000	\$1029000
Additional Items	\$18705	\$18705	\$18705	\$56115
Professional Development	\$1634270	\$1406270	\$1406270	\$4446810
Technology-Related Staffing	\$10109936	\$10109936	\$10109936	\$30329808
End-User Support	\$150000	\$150000	\$150000	\$450000
Budget Totals	\$29319863	\$23983878	\$23983878	\$77287619

#### Budget Process:

Year 2 and 3 of the planned budget are identical due to unknown funding and pending approval of some projects.

### 5.4 Potential Funding Resources

Funding Source	2002-2003	2003-2004	2004-2005	Category Totals
Funding Source Totals	\$0	\$0	\$0	\$0
Budget Totals	\$29319863	\$23983878	\$23983878	\$77287619

001 0021  
 001 0030  
 001 0140  
 45742

03-04  
 04-05  
 05-06

5.3  
 5.4

## Phase 6 - Identify Monitoring, Evaluation & Revision Processes

### 6.1 Action Plan Monitoring Strategy

The needs of CPS will continually be monitored and assessed. The following guidelines provides a map that will be used to establish benchmark goals and monitor implementation of the Technology Plan:

1. Develop Columbus Public Schools Strategic Educational Plan *WHO?*
2. Develop a district professional development plan that addresses the key changes the district needs to make to achieve its educational vision and goals.
3. Review the district's performance-based curriculum to determine how to implement a technology scope and sequence framework to help teachers weave the district-adopted curriculum, student-centered learning practices, and technology into a rich learning environment for students.
4. Revise the district technology plan to provide greater focus and support for instructional technology, referencing the district strategic vision and goals.
5. Identify resources and support needed to carry out the district technology plan, including instructional materials, professional development, and technology resources.
6. Revise the district technology plan to align with the new state educational technology plan, 'Implementing Technology to Support Student Learning.'

### 6.2 Plan Impact Evaluation

#### Assessing the Plan Impact

The authoring team scheduled bi-monthly meetings to collaborate on development of the plan. This team has included key educational leadership contacts to ensure compliance with the Districts educational goals. The total makeup of the team included the following:

- CIO and IDT advisory team,
- District leadership team,
- Technology professionals from both the district and community,
- Departmental technology representation,
- School technology and instructional representation and leadership, and
- Vendors and consultants currently involved with district administrative and instructional, and technology solution identification.

A five-month timeframe was established for development of the district plan incorporating the following major tasks:

- Planning
- Assess the current state of CPS technology
- Identify IT Initiatives and map to educational goals
- Develop future state architecture and transformation plan
- Revise organization model to support CPS IT plan
- Develop funding model and identify sources
- Develop plan revision process

#### Evaluating the Outcomes and Impact of Technology Strategies

*Encourage* As a benchmark for developing a CPS K-12 Technology Curriculum, CPS will use the National Education Technology Standards Performance Indicators developed by ISTE.

Prior to completion of Grade 2 students will:

- CURRICULUM*  
*CONCURRENCE*  
*???*
- Use input devices (e.g., mouse, keyboard, remote control) and output devices (e.g., monitor, printer) to successfully operate computers, VCRs, audiotapes, and other technologies.
  - Use developmentally appropriate multimedia resources (e.g., interactive books, educational software, elementary multimedia encyclopedias) to support learning.
  - Use technology resources (e.g., puzzles, logical thinking programs, writing tools, digital cameras, drawing tools) for problem solving, communication, and illustration of thoughts, ideas, and stories.

Prior to completion of Grade 5 students will:

- Use keyboards and other common input and output devices (including adaptive devices when necessary) efficiently and effectively.
- Use general-purpose productivity tools and peripherals to support personal productivity, remedy skill deficits, and facilitate learning throughout the curriculum.
- Use technology tools (e.g., multimedia authoring, presentation, Web tools, digital cameras, scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom.
- Use telecommunications and online resources (e.g., e-mail, online discussions, Web environments) to participate in collaborative problem-solving activities for the purpose of developing solutions or products for audiences inside and outside the classroom.
- Use technology resources (e.g., calculators, data collection probes, videos, educational software) for problem solving, self-directed learning, and extended learning activities.

Prior to completion of Grade 8 students will:

- Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use.
- Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.
- Use content-specific tools, software, and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research.
- Design, develop, publish, and present products (e.g., Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.
- Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving.
- Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.

Prior to completion of Grade 12 students will:

- Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole.
- Use technology tools and resources for managing and communicating personal/professional information (e.g., finances, schedules, addresses, purchases, correspondence).
- Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity.
- Select and apply technology tools for research, information analysis, problem solving, and decision-making in content learning.

- Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.
- Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works.

### 6.3 End-User Support Monitoring

#### Monitoring Technology Related Staff

Jack???

#### Monitoring End-User Support Strategies

All Trainers attending Train-the-Trainer Workshops will fill out evaluation forms. These evaluations will be collected by the Instructional Technology Department and analyzed for Instructor and courseware effectiveness. Subsequent workshops will be revised and improved based on the responses from these evaluations.

This model of evaluation and improvement will extend to the Teacher Workshops in each district. The Instructional Technology Department will provide Trainers with an evaluation form to distribute at Teacher Workshops. The Instructional Technology Department will use these evaluations to provide Trainer support and get dynamic feedback from the Teacher workshop level of training. The Instructional Technology Department will then follow select teachers into their classrooms and observe the integration of technology at the delivery point of instruction. Adjustments and improvements will be made to the Train-the-Trainer and Teacher Workshops based on these observations and evaluations.

Beginning in the Fall semester of 2003, the Instructional Technology Department will distribute the Self-Evaluation of Computer Skills to their district's teachers at the beginning and the end of the semester. In subsequent year, this assessment will take place at the beginning and the end of the school year. The Instructional Technology Department will compile data from this assessment tool, conduct a statistical analysis, and compare the results of the control group (beginning of semester) and the end of semester data.

#### Monitoring Technology-Related Staff Development

The job of staff members is much more demanding today than it was ten years ago. Adults need time to experiment and to become comfortable with new job-related techniques and with supporting technology. Staff members need to be supported in this learning process. They need time to learn to use technology and how to manage the use of technology in the classroom.

#### Recommendations:

- Continue the Teacher Training Learning Series program with emphasis on the integration of technology into the curriculum.
- Create a Technology Professional Development Position with emphasis on training teachers on how to integrate technology into instruction and incorporating project-based learning methods.
- Ensure that technology training includes authentic tasks to demonstrate how to apply technology in education.
- Hold teacher learning days for curriculum integration of technology.
- Provide staff development training during in-service days.
- Provide incentives for teachers to integrate technology into the classroom. *WHAT TYPES?*
- Provide additional support for integrating technology into the classroom.
- Utilize the staff development resources within the Central Ohio area.



- Establish a floating substitute to free staff during the school day to participate in technology professional development.
- Modify school schedules to allow minimum days on a regular basis to provide professional development time.
- Modify the role of the District Technology Director to focus more specifically on the instructional use of technology.
- Establish teacher competency standards for technology and use them to screen applicants and establish performance goals for staff.
- Establish more professional development opportunities through the use of compressed video and satellite.

#### **6.4 Plan Update Process**

This plan provides the District a roadmap for and technology staff development, K-12 technology curriculum development and curriculum integration. This three-year plan will focus on the District's direction for integrating technology into the curriculum, continued staff development and technology access for students and staff. Technology is constantly changing, and these changes continue to influence every area of school and district functioning. Technology planning cannot be considered in isolation of other areas. A balance must always be maintained so that the needs of students, teachers, administration and the curriculum goals of the district are the driving forces behind the implementation of technology. In order to keep the plan a living process and continually updated, the major stakeholders (MIS, district, teachers, and parents) will collaborate to ensure that the plan is implemented and changed, when necessary.

#### **6.5 Appendix**

Information Compiled by: \_\_\_\_\_ Date completed: \_\_\_\_\_

## SCHOOL DISTRICT AND COMMUNITY DEMOGRAPHICS WORKSHEET

Utilizing data from district resources, complete the following demographic summary matrix prior to entering data online in Phase 1, Activity 1, Step 3. You may print this screen, or you may download a Word or PDF file to your hard drive.

Category	Grade Levels	# Faculty	# Students	# Free / Reduced Lunches	# Schools (Buildings)	# Classrooms
Elem	K-5	2263	31488	22,083	92	1979
MS	6-8	1014	14886	457	26	845
HS	9-12	1089	15960	6894	19	879
CC	9-12	97	299	270	4	69
K-8	K-8	48	703	278	2	31
<del>6-10</del>	<del>6-10</del>	<del>26</del>	<del>349</del>	<del>2</del>	<del>1</del>	
	Totals:					

## EXHIBIT B



Carol Van Deest  
<vandeest@osn.state.  
oh.us>

09/23/2003 09:18 AM

To: Rick Reynolds <RReynolds@columbus.k12.oh.us>, "Dr. Paul Lucas"  
<plucas@columbus.k12.oh.us>, Jack McCarrick  
<jmccarr@columbus.k12.oh.us>, Neena Giallombardo  
<ngiallom@columbus.k12.oh.us>, Chris Campbell  
<chrisc@columbus.k12.oh.us>

cc:

Subject: CPS' Technology Plan

To My Columbus Public School Contacts:

Columbus' deadline for filing their district tech plan was August 2, 2003.

In viewing your online TPT (Tech Planning Tool) I see that you still need to complete Phases: 1.2, 2.5, 3.4, 4.1, 4.2, and 6.5.

It is important that your tech plan be approved ASAP so that you can comply with the e-rate requirements to have a completed plan in place prior to signing and submitting your Form 486.

Please keep me informed about your progress towards completing the TPT. Do not hesitate to call or email me for any assistance that you might need.

Thanks,  
Carol

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Carol Van Deest  
Ohio SchoolNet  
740-967-1079  
vandeest@osn.state.oh.us  
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## EXHIBIT C



Ohio SchoolNet

District Columbus City IRN 043802  
District Contact Name Pete Trautman  
Phone Number 614-365-5000 Email \_\_\_\_\_

☒ Approved Technology Plan – meets all criteria

☐ Technology Plan does not meet criteria. It may be resubmitted to the Super Region Manager after editing to reflect recommendations listed.

Reviewer Name Martin McKay

Date Reviewed 7/28/00

Super Region Manager Patricia Peoples *PL Peoples*

Date 7/28/00

RECEIVED  
8/7/00

*Columbus  
Public  
Schools*

*Technology  
Plan*

# Columbus City Schools District Technology Plan

1999-2004

## I. Technology Advisory Committee

- Evidence of committee members representing the community.*

Name	Community Role
Barbara Boyd	Nationwide Insurance
Duane Meyer	Nationwide Insurance
Gary Casale	Huntington National Bank
Gary Hudepohl	Hudepohl and Associates
Peter Panfil	Liebert Corporation
Charles Brown	Amdahl
Leslie Nemitoff	Gartner Group
Brendan Foley	Borden

- Evidence of a process to report progress.*

Copies of agendas are attached. Minutes from these meetings are private but the end results of these meetings are presented to the school board. The staff responsible for various tasks reports to the Director of Instructional Information Services and the Chief Academic Officer

## II. Budget Allocations

- FCC rules require sufficient budget to acquire:*

### *Hardware:*

Item	1999-2000	2000-2001	2001-2002	2002-2003
Hardware: Dell Lease	10 million	10 million	10 million	10 million (refresh)
Software	7 million	7 million	7 million	
Professional Development	2 million	2 million	2 million	

\*See Appendix C in the Instructional Technology Business Plan

With in the Dell Lease Agreement, maintanance costs are included for the life of the lease, 3 years.

### *Software:*

Item	1999-2000	2000-2001	2001-2002	2002-2003

- See Appendix C in the Instructional Technology Business Plan
- With in the Dell Lease Agreement, the cost for Office 2000, Hyperstudio, Kidpix Deluxe, and Graph Club were included. The CPS Materials Committee must approve the purchase of other software and the cost comes out of the particular Curriculum Departments.



*Professional Development:*

Source/Item	1999-2000	2000-2001	2001-2002	2002-2003
OSN/TLC	10000.00			
OSN/Novice/Practitioner	10000.00	10,000.00		
PT3 Grant	1.18 million			

- See Appendix C in the Instructional Technology Business Plan

*Telecommunication Services:*

Source/Item	1999-2000	2000-2001	2001-2002	2002-2003
General Fund/Moves, adds, changes	200,000.00	200,000.00	200,000.00	200,000.00
General Fund /Data Lines	1,400,000.00	1,400,000.00	1,400,000.00	1,400,000.00
General Fund Internet Service	500,000.00	500,000.00	500,000.00	500,000.00
General Fund/Video Conferencing	100,000.00	100,000.00	100,000.00	100,000.00

## II. Budget Allocations (continued)

- FCC rules require sufficient budget to acquire:

*Personnel:*

Item	1999-2000	2000-2001	2001-2002	2002-2003
DOITS	500,000.00	500,000.00	500,000.00	500,000.00
ETS w/Dell	148,000.00	148,000.00	148,000.00	148,000.00
OSN Liaison	100,000.00	100,000.00	100,000.00	100,000.00
Technicians	700,000.00	700,000.00	700,000.00	700,000.00
Network Support	500,000.00	500,000.00	500,000.00	500,000.00

*Evidence of spending priorities is consistent with HB 212 to manage evolving cost.*

\* See Proposal FY2001 Budget Executive Summary Page 28.

## III. Mission Statement

- See District Continuous Improvement Plan Page 3 and 4.
- On Board Agenda for June 20, 2000.

## IV.Goals

Year	Objective	Goal	Assessment /Evaluation	Accountability	Budget	Reporting
	DIIS will work with the Curriculum Department, Special Education, State and Federal Programs, Voc Ed, Target Teach and Staff Development to initiate the integration of technology into the curriculum	Understanding the benchmarks, the instructional curriculum technology specialists (ICTS) will correlate the ITSE standards k-12 and software to the curriculum guides	20 instructional software titles will be aligned with the benchmarks and will be added to the CPS curriculum guides The ISTE standards will be made available to all staff members and be included in the curriculum guides which are posted on the CPS web site	ICTS/ Curriculum Directors	General Budget	Curriculum Guides web based and printed
2001-2004	DIIS will work with the Ohio State University with a PT3 Grant: Preparing Tomorrow's Teachers To Use Technology Today	Professional Development and support for in-service teachers to increase their knowledge and abilities effectively incorporate technology	The Ohio State University, Columbus Public Schools and Columbus Education Association will conduct surveys on technology needs and abilities of the CPS staff and develop evolving visions and plans for technology uses	Project Director, 2 co-principal investigators, Director of DIIS,	PT3 Grant	Needs assessments, technology portfolios, action plans, performance indicators, assessment of progress
2000-2002	TICA: Technology Integration with Curriculum Academy CPS And Dell	Professional Development and support for in-service teachers to increase their knowledge and abilities effectively incorporate technology	Need Assessments, the Development and Use of classroom projects that integrate technology and curriculum	Dell ETS and CPS Technology Staff Development Consultant	Dell Original Purchase	Monthly Newsletter
2000-2005	Annual Goals for Students K-12 In compliance with the 2000 ITSE standards	Students K-12 will demonstrate appropriate technology skills following the new ITSE standards	The development of a new report card system that reflects the new Curriculum and technology standards	DIIS/ Curriculum chairs	General budget	Monthly news letters

- See District Continuous Improvement Plan Page 8, 18, and 36
- See Instructional Technology Business Plan Page 2

## V. Timelines: Planning and Management

- See District Continuous Improvement Plan 11,12,20,21,22 and 30.